

United States Court of Appeals
for the
Federal Circuit

CISCO SYSTEMS, INC.,

Plaintiff-Appellant,

— v. —

ARISTA NETWORKS, INC.,

Defendant-Appellee.

ON APPEAL FROM THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF CALIFORNIA IN
CASE NO. 5:14-CV-05344-BLF, JUDGE BETH LABSON FREEMAN

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Cisco Systems, Inc.

2. The name of the real party in interest (if the party named in the caption is not the real party in interest) represented by me is:

N/A

3. All parent corporations and any publicly held companies that own 10% or more of the stock of the party or amicus curiae represented by me are:

None.

4. The names of all law firms and the partners or associates that appeared for the party or amicus now represented by me in the trial court or are expected to appear in this court are:

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Arista Networks, Inc. v. Cisco Systems, Inc., No. 5:16-cv-00923-BLF (N.D. Cal.) (Freeman, J.).

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PRELIMINARY STATEMENT

Arista and its *amici* blatantly mischaracterize Cisco as seeking to monopolize general types of commands and network-industry protocols. Nothing could be farther from this case. Cisco recognizes that some individual command terms and acronyms (like ip, ipv6, BGP, OSPF, IGMP) are ubiquitous in the IT industry. But Cisco proved and the jury found that Cisco's particular *selection and arrangement* of its multiword command-line interfaces was creative, original and thus protected by copyright. And Cisco proved and the jury found that Arista had committed copyright infringement by, in its own words, "slavishly" copying Cisco's interfaces. Arista had no technical reason to infringe—to the contrary, the undisputed evidence at trial showed that other switching competitors like Dell, Juniper and HP created their own original, unique command-line interfaces rather than blatantly copy Cisco's. Arista copied instead solely to obtain illicit competitive advantage against Cisco. As Arista's own CEO admitted, it would have taken Arista "15 years and 15,000 engineers" to compete "in a conventional way" against Cisco by, among other things, developing its own original, unique compilation of multiword commands.

This Court should hold that *scènes à faire* provides no excuse for such blatant infringement. Arista abandons any defense of the district court's ruling that *scènes à faire* could be properly found under the instructions the jury was actually given, which required that Cisco's original and protected *selection and arrangement* of its

multiword commands be dictated by external factors other than Cisco’s creativity at the time of creation. That is no surprise, as the record cannot support the district court’s ruling. Instead, Arista advances, for the first time on appeal, the new theory that it could prove scènes à faire merely by showing that external factors dictated Cisco’s *selection of types of commands*.

This Court should reject Arista’s new theory. It is foreclosed by the jury instructions, which Arista does not challenge on appeal. Those instructions required Cisco to show, for infringement, that the selection *and* arrangement of its multiword commands was original. And those instructions required Arista to show, for its scènes à faire defense, that Cisco’s selection *and* arrangement of its commands was dictated by factors external to Cisco’s creativity. Unable to show any that any external factors dictated the selection *and* arrangement of Cisco’s commands, Arista may not now salvage the judgment on the new theory that constraint solely on Cisco’s selection of types of commands is enough to show scènes à faire.

Moreover, *types of commands* are just unprotectable ideas that can be expressed in innumerable ways. Thus, even if the instructions had allowed the jury to find copyright protection based on Cisco’s command selection alone (they did not), no reasonable jury could have found Cisco’s mere selection of *types* of commands protectable. And because command-*type* selection could not have been the basis for

copyright protection, no reasonable jury could have excused Arista’s infringement on the ground that external factors dictated Cisco’s selection of *types* of commands.

Finally, Arista’s new theory would effectively eliminate copyright protection for user interfaces—a result irreconcilable with *Oracle America, Inc. v. Google Inc.*, 750 F.3d 1339 (Fed. Cir. 2014), and *Apple Computer, Inc. v. Microsoft Corp.*, 35 F.3d 1435 (9th Cir. 1994). Every user interface has functional constraints on the *types* of commands it includes. If such constraint were enough to excuse infringement under a scènes à faire defense, the defense would swallow any meaningful copyright protection for user interfaces in the first place.

This Court should also reject Arista’s alternative grounds for affirmance, which merely rehash arguments this Court already rejected in *Oracle* and should not revisit here.

ARGUMENT

I. ARISTA FAILS TO OVERCOME THE LEGAL INSUFFICIENCY OF THE SCÈNES À FAIRE JUDGMENT

Arista’s answering brief abandons any effort to show substantial evidence of scènes à faire under the standard set forth in the unchallenged jury instructions and applied by the district court in the JMOL order. That standard required Arista to prove that external factors other than Cisco’s creativity dictated Cisco’s selection *and*

arrangement of its multiword commands at the time of their creation.¹ Arista instead advances a new theory of scènes à faire (Br. 31-51) that would excuse its copyright infringement so long as external factors dictated Cisco’s “selection” of “types of commands.” This Court should reject this new argument, for it is barred by the unchallenged jury instructions, contravenes basic principles of copyright law, and would render user interfaces effectively unprotectable.

A. The Unchallenged Jury Instructions Foreclose A Scènes À Faire Defense Based On Mere “Selection” Of “Types Of Commands”

Contrary to Arista’s new argument, the jury instructions made the selection *and* arrangement of Cisco’s multiword commands the touchstone of both protectability and scènes à faire. Arista did not challenge those instructions or defend the verdict in the district court based on the argument it now advances, and does not challenge those instructions on appeal. Arista’s new argument is thus waived² and in any event is incorrect.

¹ The district court reached only the compilation of multiword commands in its JMOL order (Appx9)—even though the jury might well have found infringement based on Arista’s copying of any of four other protectable Cisco compilations (Appx12673; *see* Cisco Br. 36-37). By failing to cite any substantial evidence that any of the other four compilations was scènes à faire, Arista concedes that the judgment must be reversed if there is no substantial evidence that Cisco’s multiword-command compilation was scènes à faire.

² *See, e.g., Mansourian v. Regents of Univ. of Cal.*, 602 F.3d 957, 974 (9th Cir. 2010) (“Our discretion to affirm on grounds other than those relied on by the district court extends to issues *raised* in a manner providing the district court an opportunity (footnote continued)

First, the instructions allowed the jury to find Cisco’s compilation of multiword commands protected and infringed only if Cisco’s selection **and** arrangement of its multiword commands was original. Specifically, Instruction No. 39 told the jury: “You may find any of the following elements of Cisco’s works protected as a compilation if you find that they are original: 1. The selection **and** arrangement of Cisco’s multiword command-line expressions.” Appx12672-12673 (emphasis added). Because the jury is presumed to have followed the court’s instructions in reaching its verdict, *see Spencer v. Peters*, 857 F.3d 789, 803 (9th Cir. 2017), its infringement finding means that it necessarily found originality in both the selection **and** arrangement of Cisco’s multiword commands.

Second, the scènes à faire instruction, because it applied only to the works found original and infringed, allowed Arista’s infringement to be excused only if external factors dictated both the selection **and** arrangement of Cisco’s multiword commands. Specifically, Instruction No. 61 told the jury that, to find scènes à faire, it must find that Arista “show[ed] that, at the time Cisco created the user interfaces—not at the time of any copying—external factors other than Cisco’s creativity dictated that Cisco select, arrange, organize **and** design its original features in the manner it did.” Appx12680 (emphasis added). Thus, the instructions preclude any scènes à faire

to rule on it.”) (emphasis added); *Atkins v. New York City*, 143 F.3d 100, 102-03 (2d Cir. 1998) (argument not raised in opposition to JMOL waived).

defense based merely on “selection” of “types of commands,” for only the selection **and** arrangement of actual commands could be “original” under Instruction No. 39 and thus the dictated “original features” required for scènes à faire under Instruction No. 61.

The district court’s JMOL order relied on those instructions in ruling (albeit incorrectly) that substantial evidence supported the scènes à faire judgment. The court assumed (Appx9) that “‘selection **and** arrangement of Cisco’s multiword command-line expressions’ was the element that the jury found protected and copied,” and concluded that a reasonable jury might have found that “at least certain selection **and** arrangement of multiword command-line expressions were constrained by functionality, and preexisting network industry protocols” (emphases added). Indeed, the district court repeated the conjunctive phrase “selection **and** arrangement” more than a dozen times in upholding the judgment that Arista’s infringement was excused by scènes à faire.³

In light of Arista’s failure to challenge the jury instructions or defend the judgment on the grounds it now advances, Arista is foreclosed from making the new argument (Br. 32-37) that Cisco’s multiword-command compilation was protectable,

³ Appx9:15, Appx9:28, Appx10:11, Appx11:3-4, Appx11:18, Appx11:22, Appx12:25-26, Appx12:28, Appx13:3-4, Appx13:10, Appx13:25, Appx14:24, Appx17:14-15; *see also* Appx1335:14 (pre-trial filtration order using the term “selection and arrangement”), Appx1345:8 (same).

infringed and scènes à faire based merely on selection of types of commands. Contrary to Arista’s argument (Br. 33-34), Instruction No. 33 cannot salvage its argument. While Instruction No. 33 defines a compilation generally as a work where materials “are selected, coordinated, *or* arranged in such a way that the resulting work as a whole constitutes an original work of authorship” (Appx12760 (emphasis added)), that instruction cannot override the narrower guidance set forth in Instruction Nos. 39 and 61, which specify that Cisco’s “selection *and* arrangement” of its multiword commands must be original to be protectable, and that its “selection *and* arrangement” of commands must be externally dictated to support a defense of scènes à faire. It is a commonplace that the jury instructions must be “[v]iewed in context” and “[t]aken together,” “as a whole.” *Bourns, Inc. v. Raychem Corp.*, 331 F.3d 704, 709 (9th Cir. 2003) (holding alleged instructional error harmless where earlier broad instruction was “qualified” and narrowed by subsequent instructions).

Moreover, there was nothing unusual about the district court’s instructions. Copyright protection for a compilation of individually unprotectable elements *typically* relies on original selection *and* arrangement. *See Satava v. Lowry*, 323 F.3d 805, 811 (9th Cir. 2003) (jellyfish glass sculpture) (“[A] combination of unprotectable elements is eligible for copyright protection only if those elements are numerous enough and their selection *and* arrangement original enough.”) (emphasis added). And copyright protection for a user-interface compilation in particular naturally relies

upon the “selection **and** arrangement” of features, for a user interface by definition requires the arrangement of expressions into an interactive communication with the user. Arista fails to cite any case finding a user-interface compilation protected based on command selection alone, and, to the contrary, uniform authority requires original selection **and** arrangement. *See, e.g., Oracle*, 750 F.3d at 1363 (“Oracle ‘exercised creativity in the selection **and** arrangement’ of the method declarations when it created the API packages”); *Apple Computer*, 35 F.3d at 1446 (user-interface infringement claim “must rest on the copying of Apple’s unique selection **and** arrangement” of features); *Real View, LLC v. 20-20 Techs., Inc.*, 683 F. Supp. 2d 147, 157 (D. Mass. 2010) (“the user interface is protectable as a compilation with respect to its unique selection **and** arrangement of all these features”) (quotations omitted); *O.P. Sols. Inc. v. Intellectual Prop. Network, Ltd.*, 1999 WL 47191, at *9 (S.D.N.Y. 1999) (“[I]f constituent elements of a ... user interface [are] ... unprotectable, the selection, coordination, **and** arrangement of such elements may be protectable, even though those individual elements are not.”) (all emphases added). Arista thus misplaces reliance (Br. 34) on *Feist Publications, Inc. v. Rural Telephone Service Co.*, 499 U.S. 340, 348 (1991), for the proposition that selection alone might result in an original compilation in a print-era telephone book. And again, Arista never objected to Instruction Nos. 39 or 61 based on their use of the conjunctive “selection **and** arrangement.”

B. In Any Event, “Types Of Commands” Are Merely Unprotectable Ideas That Cannot Support A Judgment Of Infringement Or Scènes À Faire

Even if the jury instructions did not foreclose Arista’s new argument (they do), basic principles of copyright law preclude its argument (Br. 45) that selection of “*types of commands* that went into the command compilations” (emphasis added) could support the judgments of either infringement or scènes à faire. To begin with, Cisco’s case is based upon Arista’s slavish copying of Cisco’s particular expression of its multiword commands—not on Arista’s using the same *type* of command. As Instruction No. 39 told the jury, it could find Cisco’s multiword commands “protected as a compilation” only if it found originality in “the selection and arrangement of Cisco’s multiword command-line *expressions*”—not in the *types* of multiword command-line expressions Cisco chose. Appx12673 (emphasis added).

Moreover, a *type* of command is simply an idea that may be expressed in any number of ways. Thus the selection merely of a *type* of command is insufficient to show original expression in the first place. *See, e.g., Bikram’s Yoga College of India, L.P. v. Evolution Yoga, LLC*, 803 F.3d 1032, 1036-41 (9th Cir. 2015) (holding that the general idea of a sequence of yoga poses, as opposed to a particular expression of words and pictures depicting a particular version of those poses, cannot be protected by copyright). Just as copyright protection cannot attach to selecting “types” of poems to include in an anthology (“sonnets” or “sad poems”) or “types” of photos to

place in a montage (“sunsets” or “sepia photos”), so it cannot attach to selecting “types” of commands for a user interface. Arista has no answer other than an unexplained footnote (Br. 36 n.84) suggesting that the threshold for creativity is “low.” Arista nowhere explains (for it cannot) what an original compilation of “types of command” would look like.

Because selection of *types* of commands thus cannot support protectability or infringement in the first place, any external constraint on such selection cannot justify a finding of scènes à faire. As the district court correctly recognized (Appx9) and Arista agrees (Br. 37), the infringement the jury excused as scènes à faire under Instruction No. 61 must involve the same expression the jury found protected and copied under Instruction No. 39—namely, Cisco’s “selection *and* arrangement of multiword command-line expressions.” Thus, any supposed external constraint on the mere selection of types of commands cannot be the basis of a scènes à faire defense.

Finally, Arista’s argument confuses scènes à faire with merger—a separate defense on which the jury found for Cisco. Arista suggests (Br. 36) that the scènes à faire judgment can be supported by showing constraint on “Cisco’s selection of the general types of commands it *needed to include* in the CLI to allow operators to control all of the features in Cisco’s products” (emphasis added). But such a functional constraint has nothing to do with scènes à faire, which concerns stock or standard devices like plots, tropes and characters. Such a functional constraint sounds

in merger, which arises where there are so few ways to express an idea that the expression “merges” into the idea. But under the district court’s unchallenged instructions (Appx12680), the jury **rejected** Arista’s merger defense (Appx1428), necessarily finding that Cisco had multiple “ways to express the ideas” contained in its works. As *amici* supporting Cisco explain (MathWorks Br. 22), if the decision to implement a function were enough to show scènes à faire, the defense would “become an exception that swallows the rule.”

C. Arista’s Expansive Definition Of Scènes À Faire Would Effectively Eliminate Copyright Protection For User Interfaces

Apart from contradicting the jury instructions and contravening basic copyright principles, Arista’s new argument would, if adopted, gravely harm innovation. Arista touts its own innovations but freely admits (Br. 14) that “there was one domain in which Arista did **not** seek to innovate—the human-facing aspects of the user interface, or CLI.” Thus, Arista does not argue that it could not innovate in its user interface; it argues that it was not obligated to even try. Under Arista’s approach, no one would innovate in the area of human-facing user interfaces. Such a rule does not promote innovation; it undermines it. *See* MathWorks Br. 26-29.

Moreover, Arista’s new scènes à faire test amounts to a collateral attack on this Court’s holding in *Oracle* that “the structure, sequence, and organization of a computer program is eligible for copyright protection where it qualifies as an expression of an idea, rather than the idea itself.” 750 F.3d at 1366. By definition,

every user interface requires, in Arista’s words (Br. 32), a “selection of the types of commands necessary to control product features.” Thus, if mere selection of needed types of commands could establish scènes à faire, user interfaces could never enjoy effective copyright protection. This Court already considered and rejected such arguments in *Oracle*, 750 F.3d at 1367, and it should reject Arista’s scènes à faire argument as a backdoor route to the same end.

For all these reasons, this Court should hold that constraint on Cisco’s “selection” of “types of commands” cannot support the scènes à faire judgment.

D. Arista Fails To Show That External Factors Dictated Cisco’s “Selection” And “Arrangement” Of Its Multiword Commands

Once Arista’s attempt to rewrite the jury instructions is rejected, it cannot marshal record support for the district court’s ruling that Cisco’s “selection *and* arrangement” of its multiword-command compilation was scènes à faire. The little evidence Arista does cite (Br. 38-42, 44-45) fails to show that a reasonable jury could have found that external factors dictated Cisco’s selection *and* arrangement of its multiword-command compilations at the time of their creation.

1. Arista’s Product-Feature Evidence Is Deficient

None of the record evidence Arista cites (Br. 37-43) relating to “product features” supports the judgment of scènes à faire. For example, Arista cites (Br. 38-39) Dr. Black’s testimony that an engineer decides to include a particular function in a computer program before creating a command corresponding to that function. *See*

Appx12126 (“You decide what features are going into the switch then that dictates what the comp[il]ation of the CLI commands is.”). But Dr. Black offered no opinion that a choice of features dictates any particular ***selection and arrangement*** of multiword command-line expressions.

Arista’s other cited testimony (Br. 39-42) fares no better. Arista CEO Jayshree Ullal’s testimony that more features require more commands (Appx11971) and Pradeep Kathail’s testimony that each command relates to a function (Appx11086) fail to show that any features or functions dictated Cisco’s particular selection and arrangement of commands. Dell executive Gavin Cato’s “expectation that a VLAN and the terminology around VLAN will ***somewhere*** appear in the CLI” (Appx63495) again says nothing to suggest that the use of the term VLAN dictates any particular selection and arrangement of commands. Anthony Li’s explanation of what portions of Cisco’s CLI he copied (Appx11870) cannot be evidence of any constraint on Cisco’s original creation. And Arista misleadingly cites (Br. 41) Greg Satz’s testimony without including his admission that a feature or function does not dictate any particular selection and arrangement of commands. *See* Appx63474-63475 (“I mean, as you described a tree, those trees can be rearranged and augmented or removed.”). No witness explained how the choice of a product feature dictated Cisco’s selection and arrangement of its multiword-command compilation.

2. Arista’s Industry-Protocol Evidence Is Deficient

Arista’s examples (Br. 43-45) of “protocol support” likewise fail to support the scènes à faire judgment. As Cisco explained (Br. 40-48), the use of individual terms and acronyms from industry protocols cannot establish that scènes à faire excuses Arista’s infringement of Cisco’s *compilation* of multiword commands, for such individual words and terms could not be the basis for the infringement verdict in the first place. *See Appx12673-12674* (Instruction No. 39 deeming individual terms and commands unprotectable).⁴ Arista thus misplaces reliance (Br. 44-45) on the *number* of multiword commands that may use a single term from an industry protocol. Such evidence cannot show that industry protocols dictated Cisco’s *selection and arrangement* of its multiword commands.

For example, Arista contends (Br. 44) that Cisco’s general decision to support the Border Gateway Protocol (“BGP”) “became an external constraint dictating the inclusion of a mini-compilation of commands referencing that protocol.” But there was no BGP “mini-compilation” in Cisco’s CLI. To the contrary, the undisputed evidence shows that Cisco engineers selected and arranged the 23 asserted commands that reference the BGP protocol by distributing them across seven separate

⁴ Arista’s *amici* make the same mistake. *See, e.g.*, Samuelson Br. 4-17 (arguing for scènes à faire based on individual “command terms” and “command names” rather than command compilation).

hierarchies, including seven in the “bgp” hierarchy, eight in the “show ip” hierarchy, four in the “show ipv6” hierarchy, and one in each of the “clear ip,” “distance,” “router,” and “timers” hierarchies. Appx51106-51108, Appx51119, Appx51122, Appx51124-51125, Appx51127, Appx51135. The same is true for all of the other protocols Arista invokes (Br. 44-45), each of which is located not in a single “ospf,” “snmp,” “igmp,” “msdp,” “isis” or “pim” hierarchy, but rather is distributed across multiple different hierarchies as selected and arranged by Cisco’s engineers.⁵ Just as the use of the instruction “broil” in multiple recipes in a cookbook does not create a protectable “mini-compilation” of “broil” recipes, using the same industry-standard term in multiple hierarchies does not create a protectable “mini-compilation” constrained by that term. *Cf. Publ’ns Int’l, Ltd. v. Meredith Corp.*, 88 F.3d 473, 481-82 (7th Cir. 1996) (compilation of individually unprotectable recipes protectable based only on “manner and order” of presentation).

⁵ For example, there is no OSPF “mini-compilation”; rather, the 35 Cisco commands Arista copied referring to the OSPF protocol are distributed among seven different hierarchies: the “clear ip,” “clear ipv6,” “ip,” “ipv6,” “router,” “show ip,” and “show ipv6” hierarchies. Appx51107, Appx5112-51113, Appx51116, Appx51122, Appx51126-51127. *See also* Appx51120, Appx51130-51133 (SNMP commands distributed across four hierarchies: “no,” “show,” “snmp,” and “snmp-server”); Appx51107, Appx51111, Appx51125 (IGMP commands distributed across three hierarchies: “clear ip,” “ip,” and “show ip”); Appx51107, Appx51111-51112, Appx51125-51126 (MSDP commands distributed across three hierarchies: “clear ip,” “ip,” and “show ip”); Appx51116-51117, Appx51122, Appx51128 (IS-IS commands distributed across three hierarchies: “isis,” “router,” and “show”); Appx51113-51114, Appx51126 (PIM commands distributed across two hierarchies: “ip” and “show ip”).

Arista cites no evidence showing that any industry-protocol terms dictated any specific ***selection and arrangement*** of commands in a CLI. The undisputed evidence demonstrated the contrary. *See* Cisco Br. 11-16. For example, Cisco engineers placed one command supporting the IP protocol (“show ip access-lists”) under the “show” hierarchy (“show ip”) but just as easily could have placed it under the “ip” hierarchy (“ip show”). Appx11233-11234 (Almeroth) (Cisco “actually put it into a different hierarchy. … Either would be an option. There’s no constraint or limitation that it’s one versus the other.”); *see also* Appx10802 (Duda) (admitting it is “certainly technically achievable” to “come up with an alternative command language”); Appx10896-10897 (Sadana); Appx12060-12064 (Shafer); Appx12324 (Venkatraman) (different organizational choices possible “for the same functions”); Appx10521-10522 (Lougheed) (“nothing sacred” about where to place commands for protocols).

Nor can Arista salvage its argument by suggesting (Br. 26-27, 52) that the district court deemed ***individual*** commands and hierarchies unprotectable. While that is true (*see* Appx12673-12674), the district court expressly allowed Cisco to show, “in support of its multiword command expressions as protectable elements,” that “the process used to create the command line expressions was related to each command expression’s ***organization in the hierarchies***.” Appx1339 (filtration order) (emphasis added). In order to excuse its infringement as scènes à faire, Arista was likewise obligated to show that Cisco’s selection and arrangement of its commands—including

into various hierarchies—was externally dictated (*see Appx 12680*). But it cites no substantial evidence supporting that conclusion.

Finally, Arista errs in suggesting (Br. 54-55) that the jury could have found scènes à faire based merely on “subgroups” of commands that “reference” or “refer to” network-industry protocols like IGMP or ipv6. Any “subgroup” of commands could be protectable and infringed under the jury instructions only if its ***selection and arrangement*** was original. And even accepting that the jury need only have found a significant portion of Cisco’s works copied to find infringement (*see Appx 12675* (Instruction No. 41)), the infringed portion still had to have the qualities of a compilation, not a random list of individual commands. Arista identifies no evidence of any “subgroup” amounting to such a “mini-compilation,” much less any evidence that industry protocols dictated any particular selection and arrangement of that portion’s commands.

3. Arista’s Customer-Preference Evidence Is Deficient

Likewise, Arista’s cited evidence of purported customer preferences cannot demonstrate scènes à faire. Arista does not dispute that general goals that a user interface be “consistent,” “usable” and “user-friendly” are not external constraints. *See Feist*, 499 U.S. at 348 (successful compilations are constructed “so that they may be used effectively”). And even granting Arista’s insistence (Br. 49-50) that “customer demands” or “preferences” can be external constraints, such preferences

still must have *dictated* Cisco’s selection and arrangement of its commands *at the time of creation* in order to support a defense of scènes à faire. Appx12680. Arista’s cited evidence fails to meet these elements.

For example, whether Cisco’s CLI eventually “became the industry standard” (Br. 8-9, 14) is irrelevant to the scènes à faire inquiry, which turns “on the circumstances presented to the creator.” *Oracle*, 750 F.3d at 1364; *Mitel, Inc. v. Iqtel, Inc.*, 124 F.3d 1366, 1375 (10th Cir. 1997) (“analytical focus” must remain on author’s selection, not infringer’s need to copy). Arista’s witnesses conceded that no “industry standards” governed user interfaces at the time Cisco created its CLI (see Cisco Br. 15-16) and that Cisco was the original creator of the 506 multiword commands that Arista copied verbatim (see Appx12210-12212 (Black)). Arista cites no evidence in the record of any “customer demand” pre-existing Cisco’s creation of its CLI. And as this Court has noted, it is irrelevant whether a work *later* “become[s] popular” or “becomes the industry standard.” *Oracle*, 750 F.3d at 1372.⁶

Further, whether customers might prefer products that “interoperate” with the products of other vendors (Br. 9) is irrelevant here. Even if switches need to

⁶ While Arista’s *amicus* Professor Samuelson similarly argues that features that become “standard” after creation can still show scènes à faire, her only cited authority did not rely on features “created after Apple’s program” (Br. 14), but rather found constraint because “[a]t least two of the systems … *preceded* Apple in use of this feature,” *Apple Computer*, 799 F. Supp. 1006, 1033 (N.D. Cal. 1992) (emphasis added).

interoperate in order to “serve the function of receiving data in packets and routing them to their destination” (Appx11214 (Almeroth)), user interfaces do not. Cisco, Arista and their competitors each produce their own proprietary switches; they can configure their human-facing user interfaces however they wish and the switches will still work together. Appx12326 (Venkatraman) (“The syntax may vary, but what you expect the router and the switch to do is quite consistent.”). Indeed, Arista offers a Linux-based interface to a substantial portion of its customers that uses **no** Cisco CLI commands, with no impact on the interoperability of its switches. Appx10802 (Duda). This case is thus a far cry from one where, as in *Mitel*, two different operators need to use the same expressions to access and operate the same shared technical platform. *See* 124 F.3d at 1375 (noting that expressive choices were “dictated by the limits inherent in the public telephone networks”). For these reasons, the Court also may disregard in this case Arista’s *amici*’s concerns (CCIA Br. 14-26; EFF Br. 25-32; GitHub Br. 9-16) about interoperability.

II. ARISTA FAILS TO REFUTE CISCO’S ALTERNATIVE ARGUMENT THAT ARISTA’S VERBATIM COPYING PRECLUDES SCÈNES À FAIRE

If the Court disagrees that the scènes à faire judgment should be reversed on the grounds above, it should reverse on the alternative ground that scènes à faire is unavailable as a matter of law when an infringer engages in verbatim copying. Arista

does not dispute this legal principle, and errs in arguing (Br. 58-60) that it is waived or irrelevant.

First, Cisco preserved this argument in its Rule 50(a) motion, which placed Arista on notice that the record showed “virtually identical” copying and stated non-exhaustive reasons why the record was insufficient to support scènes à faire. Appx1360-1361, Appx1364-1365. In *Antonick v. Electronic Arts, Inc.*, 841 F.3d 1062 (9th Cir. 2016), the Ninth Circuit held that the defendant preserved its argument that the failure to introduce source code resulted in insufficient evidence of substantial similarity, even though it raised the absence of source code in a different part of its Rule 50(a) motion. *Id.* at 1067-68. Similarly here, Cisco raised both virtually identical copying *and* insufficiency of scènes à faire evidence, which is all that the Ninth Circuit requires. *EEOC v. Go Daddy Software, Inc.*, 581 F.3d 951, 961 (9th Cir. 2009).

Second, Arista errs in suggesting (Br. 59-60) that the jury could have reached a verdict of infringement here without finding verbatim copying. Even assuming that the jury based its verdict on direct evidence of copying rather than indirect evidence based on “virtual identity,” Arista fails to offer any evidence showing less than verbatim copying. To the contrary, the direct evidence consisted of Arista’s admissions that it “slavishly” copied Cisco’s CLI (Appx45473 (Duda)) and touted its user interface to customers as a “99.999 percent” “drop-in replacement” for Cisco’s

CLI (Appx11030 (Dale)). Nor does Arista dispute that the documentary evidence reveals verbatim copying. *See* Appx1857-2067 (comparison); Cisco Br. 57-58 (detailing evidence).

Arista cannot defend itself (Br. 60) on the ground that it duplicated “only” 506 commands. *Scènes à faire* cannot excuse verbatim copying of “particular expression,” even if the infringer refrains from copying other portions of the work. *Apple Computer*, 35 F.3d at 1444 (addressing “particular expression” of “overlapping windows”). This is common sense; for example, verbatim copying of a chapter of a book cannot be excused by pointing to chapters not copied.⁷

III. NONE OF ARISTA’S ALTERNATIVE GROUNDS SUPPORTS AFFIRMANCE

Because the district court never ruled on their merits (Appx19-20, Appx4341-4342), this Court may “decline to consider [Arista’s] additional grounds for affirmance because … they would be more appropriately addressed in the first instance by the district court.” *Hydril Co. LP v. Grant Pridaco LP*, 474 F.3d 1344, 1351 (Fed. Cir. 2007). If the Court does reach Arista’s alternative grounds, it should

⁷ *See, e.g., TD Bank, N.A. v. Hill*, 2015 WL 4523570, at *17 (D.N.J. July 27, 2015) (verbatim copying of 16% of book: “scènes à faire defense does not apply due to Defendant’s significant verbatim copying”); *Fodor v. L.A. Unified Sch. Dist.*, 2014 WL 12235424, at *10-11 (C.D. Cal. June 3, 2014) (scènes à faire unavailable as to “virtually identical copies” of “sections” of book).

reject them, as each challenged verdict in Cisco’s favor is supported by substantial evidence, which Arista acknowledges (Br. 61 n.146) is the proper standard.

A. Substantial Evidence Shows That Cisco’s CLI Is Protectable Under Section 102(b)

Contrary to Arista’s argument (Br. 61-67), and similar arguments by its *amici* (CCIA Br. 5-8, 14-26; EFF Br. 2-12; GitHub Br. 4-8; Public Knowledge Br. 5-32; Samuelson Br. 18-27), Cisco’s compilations are not a method of operation excluded from copyright protection under 17 U.S.C. § 102(b). Arista fails in its effort to escape this Court’s holding in *Oracle* that, “under Ninth Circuit law, an original work—*even one that serves a function*—is entitled to copyright protection as long as the author had multiple ways to express the underlying idea.” 750 F.3d at 1367 (emphasis added); *see Sega Enters. Ltd. v. Accolade, Inc.*, 977 F.2d 1510, 1524 (9th Cir. 1992) (where “there are many possible ways of accomplishing a given task[,] … the programmer’s choice of program structure and design may be highly creative”); *Johnson Controls, Inc. v. Phoenix Control Sys., Inc.*, 886 F.2d 1173, 1175-76 (9th Cir. 1989) (structure, sequence and organization of user interfaces protectable).

First, Cisco sought protection here not in the *idea* of a CLI but rather in its particular *expression*, as embodied in the structure, sequence and organization by

which Cisco selected and arranged its multiword commands.⁸ Contrary to Arista’s assertion (Br. 62), Dr. Almeroth never testified that Cisco’s arrangement of modes and prompts was an “idea” but rather that Cisco “organized” certain modes and prompts in a *particular way* that was creative because “there’s other ways that that could have been organized” (Appx11238-11239). The record contains substantial evidence of the “multiple ways” Cisco had to select and arrange its command-line expressions, including testimony from Cisco engineers,⁹ testimony from disinterested third parties,¹⁰ and admissions by Arista’s own witnesses.¹¹ Arista does not even dispute that Cisco had multiple ways to express and structure its compilations. The jury’s rejection of Arista’s merger defense (Appx1428) confirms that it agreed.

Second, contrary to Arista’s suggestion (Br. 65), the Ninth Circuit’s decision in *Bikram’s Yoga* does not cast any doubt on this Court’s holding in *Oracle*. There, the plaintiff, who held a copyright in a book setting forth a sequence of 26 yoga poses,

⁸ The concerns of Arista’s *amici* that a judgment in Cisco’s favor would stifle competition or innovation are thus misplaced. Reversal here would leave competitors free to use the idea of a multiword command-line interface (Public Knowledge Br. 5-15), employ a common computing language (EFF Br. 27-29), and support an earlier system (GitHub Br. 11-16).

⁹ E.g. Appx10514 (Lougeed); Appx10524-10527 (Lougeed); Appx11717-11718 (Chambers); Appx11236-11240 (Almeroth).

¹⁰ E.g. Appx12060-12061 (Juniper’s Shafer) (“no constraints”); Appx12062-12063 (Shafer); Appx12324 (HP’s Venkatraman).

¹¹ E.g. Appx10800-10802 (Duda); Appx10896-10897 (Sadana).

asserted copyright protection over not only the book, but also the underlying *sequence itself*. 803 F.3d at 1035. The Ninth Circuit recognized that, while the book’s particular expression of the sequence of yoga poses was protected, the general idea of the sequence of yoga poses was not. *Id.* at 1041. *Oracle* is not to the contrary; nothing in *Oracle* suggests that copyright protection for the precise sequence, structure and organization of Oracle’s APIs extends to the use of the Java language or its general syntactic structure. *See* 750 F.3d at 1368. Likewise here, Cisco never sought to preclude Arista from creating a CLI or offering the same underlying functions as Cisco’s; it sought only to prevent blatant copying of the precise sequence, structure and organization of its multiword commands. Because *Bikram’s Yoga* poses no conflict or tension with *Oracle*, this Court’s decision remains an accurate statement of Ninth Circuit law, and the Court should reject Arista’s request (Br. 66) for an initial hearing *en banc*.¹²

Third, Arista’s appeal to “interoperability” and “compatibility” (Br. 65-67) is irrelevant, as it is undisputed that there is no requirement for “interoperability” among

¹² While Arista’s *amici* rely (CCIA Br. 18-12; EFF Br. 8-12; GitHub Br. 6-7; Samuelson Br. 12-13, 18-19) on *Lotus Development Corp. v. Borland International, Inc.*, 49 F.3d 807 (1st Cir. 1995), for policy arguments disputing the protectability of user interfaces, this Court has determined that “*Lotus* is inconsistent with Ninth Circuit case law,” *Oracle*, 750 F.3d at 1365 (citing *Johnson Controls*, 886 F.2d at 1175-76), and there is no reason to revisit that conclusion here.

user interfaces in order for their networking switches to work together. *See supra* at 18-19.

B. The Copyrighted Works Were Properly Before The Jury

Contrary to Arista’s argument (Br. 67-69), Cisco’s and Arista’s user interfaces were sufficiently in evidence to allow the jury to make a fair comparison between the works. At trial, Cisco introduced the copyright registration materials associated with its user interfaces, including all user manuals, command references, command summaries and configuration guides. Appx51173-51252 (index of Tr. Ex. 4803);¹³ Appx10843; Appx11168-11169 (Lang). Arista’s user interfaces likewise were introduced through the user manuals.¹⁴ Cisco’s manuals alone, which “exceed[] 600,000 pages” (Appx11197), provide more than sufficient evidence of the contents of the user interfaces.¹⁵ Customers learn about each interface (including all commands) through these manuals. Appx10755-10756 (Slattery); Appx12557-12259

¹³ Exhibit 4803, a thumb drive that includes all of the materials submitted to the Copyright Office including user manuals and source code, consists of “hundreds of thousands of pages.” Appx11302.

¹⁴ Appx20000, Appx20368, Appx20597, Appx20983, Appx22127, Appx23583, Appx25115, Appx26975, Appx29143, Appx31375, Appx33623, Appx35865, Appx38143, Appx40427, Appx42567 (Tr. Exs. 1-15) (covers of Arista manuals); Appx11265-11266 (Almeroth).

¹⁵ Contrary to Arista’s misstatement (Br. 67 n.156), the district court never required Cisco to provide “a list of the exhibits that constituted Cisco’s works,” but instead asked Cisco to have such a list “available for me, if I get a question” from the jury (Appx12637).

(Almeroth) (manuals the “authoritative source” and reflect contents). Witnesses also testified to customers’ experiences. Appx10506-10509 (Lougheed); Appx10678-10679 (Remaker); Appx11219-11224 (Almeroth); Appx12130-12131 (Black).

Moreover, Arista does not identify a single example of any feature absent from the record that the jury needed to compare the works. In *Data East USA, Inc. v. Epyx, Inc.*, 862 F.2d 204, 207 (9th Cir. 1988), for example, the defendant claimed that, because the plaintiff had submitted still photographs from a karate arcade game rather than the “entire” game itself, there was insufficient evidence to establish its contents. The Ninth Circuit disagreed, holding that the photographs and trial testimony “constitute sufficient evidence of the contents of the arcade game’s audio-visual work **to make a fair comparison** with Epyx’s game.” *Id.* (emphasis added). So too here, materials comprising the entire user interfaces, accompanied by testimony, sufficiently allowed for a “fair comparison.”¹⁶

Antonick, Arista’s only cited authority (Br. 67), is inapposite. There the plaintiff asserted source code infringement but failed to put **any** source code into evidence. 841 F.3d at 1066. Here, in sharp contrast, Cisco put in abundant evidence

¹⁶ Arista errs in suggesting (Br. 68) that Cisco conceded that the manuals did not contain the “totality” of the user interfaces. Rather, referring to unauthenticated third-party manuals, Cisco argued that Dr. Black could not testify that the contents of one manual reflect operations of other products not covered by that manual. Appx11899-11901.

of the asserted works, which were its user interfaces, and had no need to present any source code to the jury. Appx10546 (Arista: “the only claim of copying … is as to the CLI, not the source code”); *Abarca Health, LLC v. PharmPix Corp.*, 806 F. Supp. 2d 483, 491 (D.P.R. 2011) (source code irrelevant to comparing similarities between user interfaces).

C. Substantial Evidence Shows That Cisco’s User Interfaces Are Copyrighted Works

The district court properly rejected Arista’s supposition (Br. 69) that Cisco needed to separately register its operating systems and associated user interfaces (Appx10111-10112). “[T]he single registration of a computer program … accomplish[es] two interrelated yet distinct registrations; one in the program itself and one of the … user interface of that program.” *Mfrs. Techs., Inc. v. Cams, Inc.*, 706 F. Supp. 984, 993 (D. Conn. 1989). Arista’s authorities (Br. 69-70) referencing a work’s “independent economic value” are fair use decisions; none addresses the definition of the work in the first instance. And in any event, Cisco introduced substantial evidence of the independent “value” of its CLI.¹⁷

¹⁷ See, e.g., Appx10468 (Bakan) (describing “the value in the CLI,” including that it “is a very important aspect of our products”); *id.* (“a very critical aspect of our product portfolio”); Appx10475 (Bakan) (discussing “the value of the CLI”); Appx11055 (Kathail) (agreeing “Cisco CLI is important to Cisco’s business”).

Moreover, Cisco’s user interfaces are “fixed,” and Arista’s argument to the contrary (Br. 70-71) simply restates its assertion that a user interface cannot exist apart from its source code. But a user interface is copyrightable independent of its source code, *see Napoli v. Sears, Roebuck & Co.*, 874 F. Supp. 206, 211 (N.D. Ill. 1995), and Arista never explains how Cisco’s user interface is not fixed, *see Torah Soft Ltd. v. Drosnin*, 136 F. Supp. 2d 276, 283 (S.D.N.Y. 2001) (user interface “‘fixed’ insofar as the output is repeatable whenever the input is identical”). Cisco’s manuals further demonstrate fixation. In addition, Cisco’s registrations afford presumptions of fixation. 17 U.S.C. § 410(c). Finally, Arista never objected to the absence of a “fixation” instruction, so it has waived this point on appeal.

D. Substantial Evidence Shows That Arista Infringed Cisco’s Compilations

Contrary to Arista’s passing suggestion (Br. 71-72), there is no serious dispute that the record contains substantial evidence that Arista infringed one or more of Cisco’s compilations at the “compilation level.” Cisco had no reason to defend the jury’s infringement verdict in its opening brief, but the record nonetheless contains extensive evidence that Cisco’s compilations were protectable and infringed. For example, as Cisco explained (Br. 13)—but Arista ignored—Cisco engineers were free to organize and arrange commands in multiple, creative ways, such as by deciding to put a command within one hierarchy rather than another. *See* Appx10522 (Lougeed); Appx10655 (Remaker); Appx10682 (Remaker); Appx11234 (Almeroth).

The Ninth Circuit recognizes this decision-making “process” as evidence of creativity in a compilation. *CDN Inc. v. Kapes*, 197 F.3d 1256, 1259-61 (9th Cir. 1999). Arista’s own witnesses acknowledged that Arista could have done “something very different” but chose not to. Appx45468-45470 (Tr. Ex. 197). Engineers from Juniper and HP agreed there was an “open pasture” to create entirely different CLIs. Appx12060-12061 (Shaffer); *see also* Appx12324 (Venkatraman) (similar); Appx12063-12064 (Shafer) (noting differences in “configuration”). Finally, the jury could credit Dr. Almeroth’s undisputed testimony as to Cisco’s creativity at the compilation level. *See, e.g.*, Appx11222; Appx11226.

For all these reasons, Arista’s alternative grounds for affirmance are unavailing.

CONCLUSION

This Court should reverse the judgment below, direct entry of judgment for Cisco on copyright liability, and remand for further proceedings.

Dated: February 5, 2018

Respectfully submitted,

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PROOF OF SERVICE

The undersigned hereby certifies that on February 5, 2018, I electronically filed the foregoing REPLY BRIEF FOR PLAINTIFF-APPELLANT with the Clerk of the Court for the United States Court of Appeals for the Federal Circuit by using the appellate CM/ECF system. I certify that all participants in the case are registered CM/ECF users and that service will be accomplished by the CM/ECF system.

/s/ Kathleen M. Sullivan
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CERTIFICATE OF COMPLIANCE

Counsel for Plaintiff-Appellant hereby certifies that:

1. This brief complies with the type-volume limitation of Fed. Cir. Rule 32(a) because it contains **6,790** words (based on the Microsoft Word word-count function) excluding the parts of the brief exempted by Fed. R. App. P. 32(a)(7)(B)(iii) and Fed. Cir. Rule 32(b).
2. This brief complies with the typeface requirements of Fed. R. App. P. 32(a)(5) and the typestyle requirements of Fed. R. App. P. 32(a)(6) because it has been prepared in a proportionately spaced typeface using Microsoft Word in Times New Roman, 14-point type.

Dated: February 5, 2018

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